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ABSTRACT

Pilot programs for comprehensive health screening have been implemented in Texas public schools since the 1977-78 school year. This was the first year state funds were appropriated for programs designed for the purpose of screening children for health problems. Students to be screened in the program were limited to kindergarten, grade six, and those in grade one who had not been part of the screened population in kindergarten. Kindergarten and first grade students were selected as a primary target group because of the possibility of identifying health problems at an early stage. The inclusion of sixth graders in the target population was determined to be appropriate due to the possibility of developmental problems which children encounter at about this age. The report focuses upon seven questions which examine the implementation processes, outcomes of the pilot programs, and availability of other health services for children. Relevant findings and observations pertinent to each question are presented. (JN)

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State Board of Education

# Evaluation Report on Comprehensive Health Screening (TEC 11.20) 1979-80

Submitted to the Governor and the Sixty-seventh Legislature

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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**Texas Education Agency**

- STATE BOARD OF EDUCATION
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- STATE DEPARTMENT OF EDUCATION

201 East Eleventh Street
Austin, Texas
78701

December, 1980

TO THE HONORABLE GOVERNOR OF TEXAS AND
MEMBERS OF THE SIXTY-SEVENTH LEGISLATURE:

Section 11.20(f) of the Texas Education Code mandates that the Central Education Agency report its findings and recommendations concerning Pilot Programs for Physical Evaluations of School Children to the Legislature during the first month of each regular session. This report is hereby transmitted.

These pilot programs were first authorized by the Sixty-Fifth Legislature and funding was authorized beginning with the 1977-78 school year. Seventeen programs have been funded and the funding level for the current biennium is $750,000. The cost during the 1979-80 school year, ranged from $19 to $70 per student screened with an average cost of $32 per student.

Data collected during the past three years of this pilot program indicate that children had previously unidentified health needs, but establishing the most cost effective method for detecting these needs is the primary challenge. The recommendations, as adopted by the State Board of Education on October 11, 1980, reflect this challenge (see Executive Summary, page iii.)

The Central Education Agency shall be pleased to provide further information upon request.

Respectfully submitted,

Joe Kelly Butler

Joe Kelly Butler

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# Executive Summary of Evaluation Report Of Comprehensive Health Screening Programs (TEC 11.20), 1979-80

During the 1979-80 school year, pilot programs for comprehensive health screening were conducted through 12 local school districts and two education service centers. During the second year of the current biennium, these 14 sites will again implement programs. Since 1977, the first year of comprehensive health screening funded by the state, 17 programs have been operated. The level of funding for the current biennium is $750,000.

**Program Outcomes**

Comprehensive screening was conducted at kindergarten, first and sixth grades. In general, programs were implemented as planned and according to the established guidelines. Of those students in the populations where screening occurred, 10,594 students, or 69 percent, availed themselves of the screening. Approximately one-fourth of the eligible population refused the screening.

Of the students who were screened, approximately 40 percent were referred by the nurse to a health care provider for subsequent diagnosis and treatment. Fifty percent of those who were referred actually visited a health care provider. Of those students who visited the health care provider, almost 80 percent had problems which resulted in a specific diagnosis.

**Critical Findings**

Data reflect the need for health screening of children. However, the effectiveness of this delivery system is based upon the willingness and cooperation of parents in granting permission for their children to be screened.

Subsequent to referral, students generally were not taken to health care providers as recommended by nurses, primarily because of differing perceptions of families about health care needs of children. However, there were no reports of significant or major problems which did not result in diagnosis and care. The majority of those students not visiting a health care provider were dental referrals. Dental problems appear to be perceived by parents differently than other problems.

In relation to implementation procedures, the framework of this screening program did not provide for coordination with on-going health services in the schools. Because there was no requirement for a comprehensive needs assessment to be undertaken by the local school district to determine level and type of screening needed, reports of duplication of screening, as well as underutilization of the pilot program occurred. The extent to which screening provided by other agencies was available was not determined by the programs prior to funding.

**Cost Per Student**

Cost of the screening programs ranged from $19 to $70 per student screened with an average of $32 per student across all programs. In 11 of the 14 programs the cost per student screened was $35 or less. Two major factors caused these costs to vary between sites: (1) the salaries of nurses and aides, which was 85 percent of the budget in almost all cases, differed, and (2) the number of students screened by programs varied from 316 to 1,588.

The cost per student has decreased each year of the operation of the pilot program. Cost per student in 1977-78 was $70, and in 1978-79, $36. Start-up costs, a late beginning of screening, capital outlay, and

inexperience with this type of health service were the major causes of the excessive cost during the first year of implementation. During 1979-80, in sites where screening saturation was reached, approximately 600 students with one nurse and one aide conducting the screening, the cost per student was approximately $30.

**Recommendations**

Data collected during the past three years of pilot comprehensive screening programs indicate that children had previously unidentified health needs. Establishing the most feasible and appropriate methods for detecting these needs is the primary challenge.

1. Continue and/or increase participation in an inter-agency cooperative effort to coordinate health care services for children.

   - The Texas Department of Health, Texas Department of Human Resources, U.S. Department of Human Services and Health, and the Texas Education Agency are involved in health care for children. The activities of these agencies could be coordinated with commitment from all involved agencies. (A collaborative effort between the Texas Department of Human Resources and the Texas Education Agency was begun in January, 1980 to integrate school health services and the Early Periodic Screening Diagnosis and Treatment Program—EPSDT, Appendix D.)

   - Staff resources from the Texas Education Agency would be required for this activity.

2. Provide technical assistance to local school districts with (a) concentration upon management systems to meet local district needs and public relations programs aimed toward improving understanding of the need for health care and (b) developing curriculum materials and guides for both children and parents regarding health care of children.

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# Introduction

Pilot programs for comprehensive health screening have been implemented in Texas public schools, as first authorized by the 65th Texas Legislature, since school year 1977-78. This was the first year state funds were appropriated for programs designed for the purpose of screening children for health defects or problems. A reauthorization by the 66th Legislature assured continuation of the pilot programs through the school year 1980-81.

The programs implemented in the school year 1979-80, the first year of the biennium, were funded through 12 local school districts and two education service centers (ESC). The funded programs were as follows:

| | |
|---|---|
| A&M Consolidated ISD | Paris ISD |
| Austin ISD | Port Arthur ISD |
| Anson ISD | Sulphur Springs ISD |
| Brownsville ISD | Texarkana ISD |
| Edgewood ISD | Wylie ISD |
| Goose Creek ISD | Region I ESC |
| Longview ISD | Region XIX ESC |

Programs in Sulphur Springs, Wylie and Anson also screened students in other school districts. Because each of these districts are in rural areas of the state, the populations to be screened were quite small, offering the nurses the opportunity to screen in nearby school districts.

Programs operated by the education service centers screened students in 15 school districts. A description of the different strategies used in implementing screening activities is included in a latter part of this report.

Students to be screened in the program were limited to kindergarten, grade six, and students in grade one who had not been a part of the screened population in kindergarten. Kindergarten students were selected as a primary target group, as well as first graders not previously screened, because of the possibility of identifying health problems at an early stage, especially those which might potentially have an impact on children's education.

The inclusion of sixth graders in the target population was determined to be appropriate because of possible developmental problems which children encounter at about age eleven or twelve.

Proposals from all funded sites were reviewed by staff in the Texas Education Agency and negotiated with program managers to insure that the programs were implemented according to the prescribed guidelines. Monitoring was conducted in each program site during the months of February and March by staff of the Texas Education Agency. During and following monitoring, recommendations to program personnel were made to maximize the effectiveness of the pilot programs and to insure that all activities followed the specifications in the guidelines.

This report focuses upon six basic questions which examine the implementation processes and outcomes of the pilot programs in school year 1979-80 and a seventh question addresses the availability of other health services for children. Relevant findings and observations pertinent to each question are presented.

The following questions are addressed in this report:

- How many students were screened, referred, and visited health care providers, and how many students refused screening?
- To what extent were identified health problems treated and what barriers were encountered in getting children health care?
- How was the program implemented in different sites?
- Were the standardized screening procedures implemented in all program sites?
- What was the cost of health screening programs?
- How was the time of program personnel utilized?
- To what extent are free health services available to children?

Responsibility for program approval, administration, and monitoring of the pilot programs was in the Division of Student Services. Evaluation and data collection were responsibilities of the Division of Program Evaluation. Data presented in this report were collected from a data collection instrument used by all programs and information obtained during monitoring was useful in describing the programs.

## HOW MANY STUDENTS WERE SCREENED, REFERRED, AND VISITED HEALTH CARE PROVIDERS, AND HOW MANY STUDENTS REFUSED SCREENING?

Table 1 reflects data relative to the screened student populations by grade, as well as students refusing screening. A total of 10,594 students were screened during the 1979-80 school year. This was 69 percent of the total number of students who were eligible for screening, i.e., the screening program was made available to 15,209 students. The percentage of eligible students screened was highest at kindergarten (70 percent) and lowest at grade six (62 percent).

Of those students screened, 4,554 (43 percent) were referred to health care providers for further examination and possible care. (Only 16 percent of the referred students had problems previously known to the school.) Fifty percent of those who were referred to health care providers actually visited such a person. There were no significant differences in the percent of students who visited health care providers by grade level.

The total number of students refusing screening was 4,266 or 28 percent of the population eligible for screening. Refusals were highest at grade six (35 percent) while only 18 percent of the parents of kindergartners refused screening for their children. The percent of students from whom there was neither a permission slip or refusal slip was approximately ten percent. Two percent of all students refused screening because of personal reasons and four percent did not provide a reason. Parents of 13 percent of the students in the eligible screening population indicated that sufficient care for the child was provided by the family and physical screening at school was unnecessary.

By program site (Tables 2-5), there were significant differences in the percent of students screened, referred, visiting health care providers, and refusing screening. Those sites where 75 percent or more of the eligible population was screened were A&M Consolidated ISD, Brownsville ISD, Edgewood ISD, Longview ISD, Region I ESC, Region XIX ESC, and Wylie ISD (seven of 14 programs).

Approximately one-half of the students eligible for screening refused the screening in two program sites—Austin ISD (56 percent) and Goose Creek ISD (49 percent). The Austin ISD program served only grade six and in Goose Creek ISD, the percent of refusals at grade six was 75 percent (see Table 5).

Refusals of screening were less than 15 percent in five programs, A&M Consolidated ISD, Brownsville ISD, Edgewood ISD, Longview ISD, and Region I ESC. All of these were sites in which a positive image of the screening program had been developed both within the school and the community.

**Observation**

The availability of comprehensive health screening by the school does not assure maximum utilization of the service (one-fourth of all students refused screening.) After screening was conducted, 50 percent of the students who, in the nurses' opinions, needed further diagnosis and treatment sought such care from a physician, dentist, or other appropriate health care provider.

**TABLE 1**
**Number of Children Eligible for Screening, Screened, Referred, Visited Health Care Provider, and Refused Screening, 1979-80**

| Grade | Number Eligible for Screening* | Screened | | Referred | | Visited HCP** | | Refused | |
|---|---|---|---|---|---|---|---|---|---|
| | | Number | Percentage | Number | Percentage | Number | Percentage | Number | Percentage |
| K | 4,759 | 3,771 | 79 | 1,788 | 47 | 944 | 53 | 856 | 18 |
| 1st | 4,363 | 3,022 | 69 | 1,325 | 44 | 676 | 51 | 1,233 | 28 |
| 6th | 6,137 | 3,801 | 62 | 1,441 | 38 | 673 | 47 | 2,177 | 35 |
| Total | 15,259 | 10,594 | 69 | 4,554 | 43 | 2,293 | 50 | 4,266 | 28 |

*Number of students in each grade on sites where screening occurred.
**Health care provider.

**TABLE 2**
**Total by Program**
**Number of Children Eligible for Screening, Screened, Referred, Visited Health Care Provider, and Refused Screening, 1979-80**

| District | Number Eliible for Screening* | Screened | | Referred | | Visited HCP** | | Refused | |
|---|---|---|---|---|---|---|---|---|---|
| | | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| A&M Consolidated ISD | 841 | 724 | 86.1 | 68 | 9.4 | 57 | 83.8 | 117 | 13.9 |
| Anson ISD | 540 | 316 | 58.5 | 172 | 54.4 | 62 | 36.0 | 234 | 43.3 |
| Austin ISD | 1,632 | 710 | 43.5 | 188 | 26.5 | 81 | 43.1 | 922 | 56.5 |
| Brownsville ISD | 785 | 668 | 85.1 | 619 | 89.9 | 323 | 52.2 | 25 | 3.2 |
| Edgewood ISD | 875 | 20 | 82.3 | 563 | 78.2 | 261 | 46.4 | 123 | 14.1 |
| Goose Creek ISD | 1,282 | 662 | 51.6 | 548 | 82.8 | 181 | 33.0 | 622 | 48.5 |
| Longview ISD | 1,061 | 946 | 89.2 | 246 | 28.0 | 128 | 52.0 | 115 | 10.8 |
| Paris ISD | 910 | 633 | 69.6 | 129 | 20.4 | 32 | 24.8 | 277 | 30.4 |
| Port Arthur ISD | 1,620 | 905 | 55.9 | 222 | 24.5 | 96 | 43.2 | 465 | 28.7 |
| Region I ESC | 1,831 | 1,588 | 86.7 | 622 | 39.2 | 513 | 82.5 | 249 | 13.5 |
| Region XIX ESC | 1,140 | 877 | 76.9 | 384 | 43.8 | 212 | 55.2 | 223 | 19.6 |
| Sulphur Springs ISD | 848 | 551 | 65.0 | 222 | 40.3 | 106 | 47.7 | 297 | 35.0 |
| Texarkana ISD | 1,122 | 712 | 63.5 | 251 | 35.3 | 158 | 62.9 | 407 | 36.3 |
| Wylie ISD | 772 | 582 | 75.4 | 320 | 54.9 | 83 | 25.9 | 190 | 24.6 |

*Number of students in each grade on sites where screening occurred.
**Health care provider.

**TABLE 3**
**Number of Children Eligible for Screening, Screened, Referred, Visited Health Care Provider, and Refused Screening in Kindergarten, 1979-80**

| District | Number Eligible for Screening* | Screened | | Referred | | Visited HCP** | | Refused | |
|---|---|---|---|---|---|---|---|---|---|
| | | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| A&M Consolidated ISD | 299 | 270 | 90.3 | 27 | 10.0 | 23 | 85.2 | 29 | 9.7 |
| Austin ISD | -0- | -0- | -0- | -0- | -0- | -0- | -0- | -0- | -0- |
| Brownsville ISD | 211 | 186 | 88.2 | 166 | 89.2 | 94 | 56.6 | 3 | 1.2 |
| Edgewood ISD | 316 | 241 | 76.2 | 197 | 81.7 | 90 | 95.7 | 51 | 16.1 |
| Goose Creek ISD | 469 | 285 | 60.8 | 252 | 88.4 | 104 | 41.3 | 175 | 37.3 |
| Anson ISD | 230 | 153 | 66.5 | 97 | 63.4 | 33 | 34.0 | 76 | 33.0 |
| Longview ISD | 533 | 476 | 89.0 | 171 | 35.9 | 88 | 51.5 | 57 | 10.7 |
| Paris ISD | 150 | 97 | 64.7 | 12 | 12.3 | -0- | -0- | 53 | 35.3 |
| Port Arthur ISD | 522 | 383 | 73.4 | 108 | 28.2 | 48 | 39.3 | 58 | 11.1 |
| Region I ESC | 742 | 659 | 88.8 | 272 | 41.3 | 221 | 81.3 | 89 | 12.0 |
| Region XIX ESC | 395 | 307 | 77.7 | 135 | 44.0 | 70 | 51.9 | 87 | 22.0 |
| Sulphur Springs ISD | 315 | 233 | 74.0 | 75 | 32.2 | 38 | 50.7 | 82 | 26.0 |
| Texarkana ISD | 327 | 290 | 88.7 | 122 | 42.0 | 93 | 76.2 | 37 | 11.3 |
| Wylie ISD | 250 | 191 | 76.4 | 154 | 81.0 | 42 | 27.2 | 59 | 23.6 |

*Number of students in each grade where screening occurred.
**Health Care Provider.

**TABLE 4**
**Number of Children Eligible for Screening, Screened, Referred, Visited Health Care Provider, and Refused Screening in First Grade, 1979-80**

| District | Number Eligible for Screening* | Screened | | Referred | | Visited HCP** | | Refused | |
|---|---|---|---|---|---|---|---|---|---|
| | | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| A&M Consolidated ISD | 211 | 173 | 82.0 | 17 | 9.8 | 13 | 76.5 | 38 | 18.0 |
| Austin ISD | -0- | -0- | -0- | -0- | -0- | -0- | -0- | -0- | -0- |
| Brownsville ISD | 232 | 184 | 79.3 | 169 | 81.8 | 108 | 63.9 | 8 | 3.4 |
| Edgewood ISD | 304 | 273 | 89.8 | 209 | 76.6 | 95 | 45.5 | 30 | 9.9 |
| Goose Creek ISD | 452 | 277 | 61.3 | 233 | 84.1 | 64 | 27.5 | 176 | 38.9 |
| Anson ISD | 36 | 30 | 83.3 | 8 | 26.6 | 2 | 25.0 | 20 | 55.6 |
| Longview ISD | 528 | 470 | 89.0 | 75 | 16.0 | 40 | 53.3 | 58 | 11.0 |
| Paris ISD | 392 | 295 | 75.3 | 78 | 26.4 | 23 | 29.5 | 97 | 24.7 |
| Port Arthur ISD | 522 | 153 | 29.3 | 49 | 32.0 | 28 | 57.1 | 329 | 63.0 |
| Region I ESC | 414 | 382 | 92.2 | 163 | 42.7 | 148 | 90.8 | 32 | 7.7 |
| Region XIX ESC | 483 | 364 | 75.4 | 149 | 40.9 | 88 | 99.1 | 80 | 16.6 |
| Sulphur Springs ISD | 174 | 122 | 70.1 | 44 | 36.0 | 21 | 47.7 | 52 | 29.9 |
| Texarkana ISD | 394 | 129 | 32.7 | 39 | 30.2 | 25 | 64.1 | 262 | 66.5 |
| Wylie ISD | 221 | 170 | 76.9 | 92 | 54.1 | 21 | 22.8 | 51 | 23.0 |

*Number of students in each grade where screening occurred.
**Health Care Provider.

**TABLE 5**
**Number of Children Eligible for Screening, Screened, Referred, Visited Health Care Provider, and Refused Screening in Sixth Grade, 1979-80**

| District | Number Eligible for Screening* | Screened | | Referred | | Visited HCP** | | Refused | |
|---|---|---|---|---|---|---|---|---|---|
| | | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| A&M Consolidated ISD | 331 | 281 | 84.9 | 24 | 8.5 | 21 | 87.5 | 50 | 15.1 |
| Austin ISD | 1,632 | 710 | 43.5 | 188 | 26.5 | 81 | 43.1 | 922 | 56.5 |
| Brownsville ISD | 342 | 298 | 87.1 | 284 | 95.3 | 121 | 42.6 | 14 | 4.1 |
| Edgewood ISD | 255 | 206 | 80.8 | 157 | 76.2 | 76 | 48.4 | 42 | 16.5 |
| Goose Creek ISD | 361 | 100 | 27.7 | 63 | 63.0 | 13 | 20.6 | 271 | 75.1 |
| Anson ISD | 274 | 133 | 48.5 | 67 | 50.4 | 27 | 40.3 | 138 | 50.4 |
| Longview ISD | -0- | -0- | -0- | -0- | -0- | -0- | -0- | -0- | -0- |
| Paris ISD | 368 | 241 | 65.5 | 39 | 16.2 | 9 | 23.1 | 127 | 34.5 |
| Port Arthur ISD | 576 | 369 | 64.0 | 65 | 17.6 | 20 | 30.8 | 78 | 13.5 |
| Region I ESC | 675 | 547 | 81.0 | 187 | 34.2 | 144 | 77.0 | 128 | 19.0 |
| Region XIX ESC | 262 | 206 | 78.6 | 100 | 48.5 | 54 | 54.0 | 56 | 21.4 |
| Sulphur Springs ISD | 359 | 196 | 54.6 | 103 | 52.6 | 47 | 45.6 | 163 | 45.4 |
| Texarkana ISD | 401 | 293 | 73.1 | 90 | 30.7 | 40 | 44.4 | 108 | 26.9 |
| Wylie ISD | 301 | 221 | 73.4 | 74 | 39.5 | 20 | 27.0 | 80 | 26.6 |

*Number of students in each grade where screening occurred.
**Health Care Provider.

## TO WHAT EXTENT WERE IDENTIFIED HEALTH PROBLEMS TREATED AND WHAT BARRIERS WERE ENCOUNTERED IN GETTING HEALTH CARE FOR CHILDREN?

The problems for which students were referred and the number of students referred for each problem is included in Appendix A. The problem for which students were most often referred was dental, representing 43 percent of all referrals. It should be noted that dental problems received less care than other problems because of perceptions of parents regarding the need for proper dental care. Hearing and vision problems were the second (16 percent) and third (11 percent) most often referred problems.

Of those students following through with a visit to a health care provider upon referral for a problem (2,293), 76 percent (1,746) had problems which resulted in a specific diagnosis. This represents 17 percent of the student population initially screened, a relatively large percent when taking into consideration the fact that 50 percent of the students who were referred never visited a health care provider.

Ninety-seven percent of the students visiting a health care provider received care, including some who received care for problems other than those for which they were referred.

Fifty-five percent of the students who visited a health care provider saw a physician and 35 percent visited a dentist. The program nurse provided care or counseling to 47 percent of the referred students—usually those with nutritional, obesity, skin, and hair problems. Regular school nurses also provided some care to 19 percent of referred students. Classroom teachers, speech therapists, audiologists, and counselors provided treatment to approximately 14 percent of the referred students.

When appropriate, nurses referred students to particular governmental agencies. Approximately 13 percent of the students were referred to such agencies or organizations.

As reflected by previous data, nurses had difficulty in getting children who were referred to visit a health care provider. Fifty percent of those referred visited health care providers. Nurses contacted 4,192 families, or 92 percent of all students who were referred, encouraging them to take their child to a health care provider.

Barriers encountered in trying to get referred children to health care providers were numerous. The most significant problem which nurses encountered was in trying to locate parents. Other barriers were:

(1) families perception of child's problem different than the nurses' perception,
(2) no family physician,
(3) no options for financing health services, and
(4) other family problems more pressing.

**Observation**

Nurses' findings regarding children's physical health were to a large extent, very accurate as confirmed by health care providers. This validates the use of nurses for initial health screening of children. However, the burden of getting children to health care providers after referral is substantial and the nurses efforts in this respect met with success less than one-half of the time.

## HOW WAS THE PROGRAM IMPLEMENTED IN DIFFERENT SITES?

In 12 of the 14 programs, a nurse and one nurse's aide were employed to undertake the screening of students. In one site two additional nurses, both LVNs, were also employed to assist in screening and with record-keeping responsibilities. An aide was not employed in that site. In the other site, an education service center program, a separate nurse and aide screened in only one school district because of the size of that district, while the other nurse and aide screened in several small school districts. Part-time secretaries assisted with record-keeping in two sites.

A person other than the nurse was designated as program manager to assume responsibilities for the program budget and coordination between the program staff and other school district personnel.

The nurse was responsible for planning, organization, administration, supervision of the aide, and record-keeping. However, other activities which the nurses undertook differed between sites. In some sites, the nurses were involved in making presentations about the purpose of the program to parent and community groups. Where non-English speaking parents were involved, more time was required for dissemination of information.

The effectiveness of the screening program was dependent upon the rapport which the nurse had built within the community. Those nurses who had established a good public relations program reported fewer refusals of screening for children.

In all programs, nurses were required to move between sites. In the larger school districts with funded programs, movement was between campuses within the district. In the other programs, including the two education service centers, Wylie ISD, and Sulphur Springs ISD programs, the nurse and aide moved all of their screening equipment to different towns and school districts. This was an average of approximately 15 miles in most instances.

The distance between screening sites was most significant in the West Texas area served by the Education Service Center Region XIX. In order to ensure that the appropriate facility was available for screening in each site, a 24-foot van was outfitted as a screening center. This was at no cost to the program because the van was available through the education service center. The van was moved from site to site and the nurses either stayed overnight at the somewhat remote school districts or used private transportation to and from the site to their homes. Distances of up to 100 miles between the homebase (El Paso) and the school districts existed.

The Region I Education Service Center program also used a small trailer as a portable screening facility. This alleviated the problems of finding space for the program nurse on each new campus. In several school districts, space for the screening was a significant problem.

Orientation to new schools and new administrators required time away from actual screening of students. In one program where several moves were required, the nurse reported losing approximately 20 days of actual screening time. Generally, in those sites where there was a high degree of cooperation between school administrators and the program nurse, less time was spent in the orientation and organizational tasks. The program manager was responsible for insuring this cooperation and in the instances where there were smoothly operating programs, the manager had effectively communicated with all involved parties.

**Observation**

The screening program was implemented according to the original guidelines established by the Texas Education Agency. Three major problems hampering the smooth implementation of the programs were (1) nurses movement between screening sites, (2) space for screening, and (3) public relations between the nurse and other school staff and the nurse and the community. There appears to be no way to avoid the movement of nurses between screening sites, but higher priority could be placed on establishing a more positive image of the screening programs. Consideration of a mobile unit might resolve the problem of space in certain sites, as well as problems of time lost in set-up.

## WERE THE STANDARDIZED SCREENING PROCEDURES IMPLEMENTED IN ALL PROGRAM SITES?

The purpose for establishing standardized procedures (see Appendix C) was to ascertain the feasibility of using these in all public schools.

As indicated earlier, screening was to have occurred at kindergarten, grades one and six. However, there was some flexibility in choice of these grades. Austin ISD screened only sixth graders because of a new program initiated by the district to screen first graders, and a belief by the nursing department at Austin ISD that kindergarten children usually come into the schools having had a recent physical examination and required immunizations. In other programs, screening by grade level differed by campus and perceived health needs of children on the campus.

In all cases, the actual screening conducted by the program nurse followed the established guidelines, including all aspects of physical and developmental screening. However, because both the needs of the school districts in which the programs were operated and the needs of students differed, there were considerable differences in the organization and the procedures used to implement the screening.

The most significant factor relating to school district need was the presence or availability of a regular school nurse on the campuses where the comprehensive health screening occurred. If a regular school nurse was on campus at all times, the functions of the comprehensive health screening program nurse were easier to carry out. In these cases, records were established, a health history was available, annual review of immunizations was conducted, and a less in-depth annual screening was sometimes conducted by the regular school nurse. If a nurse was only available to serve the campus on a part-time or as-needed basis, there was some organization of records, but the annual screening of students usually was not occurring. In those districts with record-keeping systems in place, the program nurses were then able to use these as needed.

Sites where regular school nurses were not available required that program nurses spend more time in organizing records, establishing procedures to facilitate the screening activity, and identifying health care providers. For instance, one program nurse served school districts that not only had no school nurses, but also had no doctors in the community. In these school districts, a great deal of the nurse's time was spent in pursuing health care for students. In another program in which the school districts employed school nurses, these nurses did all the follow-up required of students who had been referred, thus allowing the program nurse more time for screening other students.

The differing health needs of children were considered when, in the case of larger program sites, campuses were selected for the comprehensive health screening activities. For instance, several program sites selected those campuses with a high incidence of absenteeism and low income status of parents for the screening. The needs of students were considered when selecting campuses. (The presence of the screening program would be fully maximized compared to other campuses where students' outwardly perceived needs were not as great.) The selection of the districts to be served by the two education service center programs considered these factors when making the comprehensive health screening available to districts. However, because of these differences in the student populations and the demographic characteristics of an area, the activities of the nurses changed somewhat to meet existing needs.

Another factor affecting the implementation of the programs was the number of prior years the pilot comprehensive screening had been operated in a school district. Several of the program sites had very little

difficulty in initiating the screening activities and were not burdened by logistics of implementation. However, three of the rural programs found that they were reaching screening saturation of the student population and were required to identify other small districts in the area to continue the screening activities. This provided for a greater outreach for the program, but did require more time for coordination between school district administrators and program nurses. Public relations problems occurred in these sites because of the newness of the program to the community and acceptance was less than desirable.

Also affecting the screening activity was the availability of other support services and staff in the school districts. In one school district, all kindergarten students were screened by a locally-funded speech therapist, relieving the program nurse from this part of the required screening procedures. In this same district, there is annual screening of all students for scoliosis and a special screening of children for developmental or other problems which might prevent failure in school.

**Observation**

Existing health services differ between school districts because local commitment is dependent upon the district's ability to pay for special services. The result is a wide variation in health services between schools.

It was found that effectiveness of the pilot programs is dependent, to some extent, on the coordination of multiple health services in the local district. Flexibility in implementing the screening programs is necessary to ensure nonduplication of services. Allowing the district to assess its own needs for health screening services would further maximize available resources.

## WHAT WAS THE COST OF THE COMPREHENSIVE HEALTH SCREENING PROGRAMS?

The total cost, during the 1979-80 school year, of the comprehensive health screening programs in the 14 funded sites was $335,637. The largest item in the budget, in all cases, was salaries, approximately 85 percent. Of this, approximately 60 percent was for nurses salaries and 25 percent for nurses' aides salaries. Contracted services, travel, and capital outlay accounted for only eight percent of the expenditures, even though these items had been budgeted at a higher level.

Contracted services were those services provided by health care providers, physicians, and dentists, in most instances, on a consultative basis. It appeared that nurses had not utilized these consultants to the degree expected so that this expenditure was two percent of the total budget.

The reason for differences in level of expenditures between programs was related to the salaries of the nurses, ranging from $10,370 to $14,880, and the number of persons employed in each program. Those programs which employed several persons not only had higher budgets, but higher than average cost per student screened. Austin ISD, Goose Creek ISD, and Region I ESC all employed more persons than the recommended nurse and aide. The cost per student exceeded $40 in two of these programs.

Table 6 reflects the total expenditure, the number of students screened, and the cost per student in each program. The cost per screening across all programs was $32 compared to $36 during the 1978-79 school year. The highest cost per student screened was in the Anson ISD program ($70) because the number of students screened was approximately half the number screened in other sites. This occurred because of the size of the school districts which the Anson ISD served (Hamlin ISD, Stamford ISD, Lueders-Avoca ISD, and Hawley ISD) where screening saturation was quickly reached, as well as the problem of a high refusal rate (44 percent). In 11 of the 14 programs, the cost per student screened was $35 or less.

The only other cost incurred for the implementation of these programs was the expenditure of $5,163 for training of nurses prior to the beginning of the school year. The training was provided through a contractual arrangement with Austin ISD, Department of Health Services.

**Observation**

Total cost of screening was dependent upon the salary level of the nurses. Salaries were determined by the funded site based upon local wage conditions.

The sites where additional personnel (secretaries and nurses aides) were employed did not proportionately increase the number of students screened. Additional staffing of a single program does not add to the cost effectiveness of the program.

**TABLE 6**
**Number of Students Screened and Expenditures by Program**
**1979-80 School Year**

| District | Number of Students Screened | Total Expenditures | Cost per Student Screened |
|---|---|---|---|
| A&M Consolidated | 724 | $ 21,841 | $30 |
| Anson | 316 | 22,207 | 70 |
| Austin | 710 | 29,817* | 42 |
| Brownsville | 668 | 21,067 | 32 |
| Edgewood | 720 | 25,444 | 35 |
| Goose Creek | 662 | 30,797** | 47 |
| Longview | 946 | 20,231 | 21 |
| Paris | 633 | 20,780 | 33 |
| Port Arthur | 905 | 17,190 | 19 |
| Region I ESC | 1,588 | 39,695*** | 25 |
| Region XIX ESC | 877 | 29,875 | 34 |
| Sulphur Springs | 551 | 17,948 | 33 |
| Texarkana | 712 | 21,695 | 30 |
| Wylie | 582 | 17,050 | 29 |
| TOTAL | 10,594 | $335,637 | $32 |

*Included salaries of a nurse, nurses aide, and part-time secretary.
**Included salaries of 3 nurses, two (LVNs) functioning as nurses aides.
***Included salaries of 2 nurses, 2 aides, and 1 part-time secretary.

## HOW WAS THE TIME OF PROJECT PERSONNEL UTILIZED?

A time study based upon 50 students was conducted by each program during the month of November, 1979. An activity time record for the first 50 students screened during that month reflected time of program staff spent in the following activities:

- Planning with school staff
- Contact with parents, including permission forms, scheduling of screening, and follow-up required for permission and scheduling
- Screening
- Care or treatment (if it could be provided by the program nurse)
- Follow-up (after screening) with school staff, parents, health care providers, and community agencies
- Record-keeping

The actual time for screening ranged from 25 minutes to approximately one hour, with the average screening time requiring about 45 minutes. The initial contact with parents and follow-up after screening required considerable time, usually 30 to 45 minutes per child. The average time spent in all of the above activities per child was 1 hour and 45 minutes. However, two sites reported approximately three hours of staff time required per student. The remainder of the programs reported from 1 hour and 10 minutes to almost 2 hours per student for all activities associated with screening.

These times do not reflect movement between screening sites or the time of nurses spent in disseminating information about the program to parents and the community.

**Observation**

Based upon a seven-hour day for school screening, it appears that 11 of the 14 projects screened as many students as possible in one school year. An estimated number of 628 students could be screened if all screening activities, including follow-up, required 1.9 hours per student. All three of the programs which did not reach this screening level were in rural areas.

## TO WHAT EXTENT ARE OTHER FREE HEALTH SERVICES AVAILABLE TO CHILDREN?

Several types of free health services are available to school age and preschool age children. The availability of these services is dependent, however, upon the area of the state (location of city, school district, etc.) in which the child resides, and in some instances, income level of the child's family. In addition, participation in some types of programs (i.e., Head Start, Title I Regular and Migrant programs) require that some particular eligibility requirements are met for inclusion in the program, but as a participant, health services are made available to the child after other sources have been exhausted.

Table 7 includes sources and/or types of health services available to Texas children. Services available from school nurses include limited screening of children, emergency care, and care for on-going health needs. Minimal health appraisal and assessment procedures are outlined for school nurses in a *Guide for Administrators and School Nurses in the School Health Program* published by the Texas Education Agency (see Appendix B). These procedures are utilized by the regular public school nurses whenever possible. However, the extent to which they are implemented is dependent upon the nurse/student ratio in the district. Nurses funded through the Title I program must provide services in excess of those provided by regular school nursing staff.

There were 553 school districts in Texas in school year 1979-80 who employed school nurses through foundation or local funds. In addition there were 211 districts who received nursing services through the ESC support service cooperative personnel unit [TEC 16.102(n)]. There were 320 school districts which did not have nurses funded with either foundation or local funds; however, some of these may have employed federally-funded nurses. There is a continuing lack of availability of regular school nurses in districts in non-metropolitan areas. However, nurse/student ratios in the urban area districts vary from one nurse per 1,000 children to one nurse per 3,800 children.

The Children's Vision Screening Act of 1979 mandated vision screening of all children (V.A.C.S., art. 4419); however, hearing screening is not required. It is estimated that 1.5 million school children will be screened for vision problems within the next three school years.

Specific immunizations are required of all children in Texas public schools. These immunizations are available, at no cost, to any child through agencies funded by the Texas Department of Health, such as county and city health departments. Data on numbers of students given free immunizations was not available. Although approximately 740,000 doses of vaccine were administered, 223 students in the screened population did not have the immunizations required by law prior to screening.

Early Periodic Screening Diagnosis and Treatment services are available to children through the Texas Department of Human Resources. EPSDT programs are for children eligible for medicaid only. The Well Child Clinics, funded by the Texas Department of Health, serve primarily preschool age children, although these services may be provided to older children if resources are available. Approximately 76,000 children received services from these sources.

Head Start programs are for four and five year old eligible children only. These programs provide comprehensive screening, as well as care and treatment of children.

The U.S. Department of Health and Human Services has funded approximately 60 sites in Texas through private or nonprofit organizations. These grantees provide physician care of a comprehensive, primary nature to children. The cost of services is based upon family income.

**Observation**

The fact that health services, including physical screening, are available to many children does not mean that all children receive this care. Concentration and overlapping of services may occur, while some areas of the state are completely without needed health care for children.

**TABLE 7**
**Availability of Free Health Services for Texas Children**
**1979-80 School Year**

| | Number of Nurses | Number of Children Receiving Services |
|---|---|---|
| Public School Nurses | | |
| Comprehensive Health Screening Program | 15 | 10,594 |
| State and locally funded (including ESC cooperative nurses) | 1,792 | Not available |
| Federally-funded | | |
| Title I Regular | 317 | 140,697 |
| Title I Migrant | 82 | 38,616 |
| Texas Department of Human Resources | | |
| Early Periodic Screening Diagnosis and Treatment (EPSDT) | NA* | 98,178 |
| Texas Department of Health | | |
| Well-Child Clinics (unduplicated count) | NA* | 107,799 |
| Vision Screening | NA | 30,000 |
| Hearing Screening | NA | 20,000 |
| Hearing Aid Program | NA | 1,380 |
| Immunizations | NA | 739,856*** |
| Head Start—Comprehensive Screening | NA | 20,103 |
| U.S. Department of Health & Human Services | | |
| Private/nonprofit organizations** | NA | 87,100 |

*NA—not applicable, services are provided by several types of health care providers.

**Direct funding to different organizations, clinics, etc., for health care services to children. Services are provided on a sliding scale fee basis.

***Doses of vaccine administered to school age children.

# Case Studies

A six-year-old boy was diagnosed with coarctation of the aorta (a narrowing of the aorta as it comes out of the heart). He will have corrective heart surgery this summer.

Many children were diagnosed with heart problems: one, mild to severe aortic stenosis; one, mitral insufficiency; six are being followed closely for ventricular septal defect, one with mitral valve prolapse, two pulmonary stenosis, two enlarged heart; and two others will have heart catheterizations this summer for further diagnosis.

A five-year-old male, apprehensive through screening, was referred for a heart murmur and an abdominal mass in the lower left quadrant of the abdomen. The abdominal mass was diagnosed as psychogenic megacolon. He has been to three follow-up clinics.

While doing a hematocrit on a sixth grader, the nurse assistant noticed that the serum was "creamy" rather than clear. Referral to the physician resulted in a diagnosis of hyperchylomicromenia, an extremely rare genetic disorder which results in the inability to metabolize fats. The family doctor initiated diagnostic procedures on the entire family because of the genetic pattern of the disease.

A multipurpose laboratory test of urine identified one positive case of nephritis and two possible cases of glomerulo nephritis. Several cases of urinary tract infection were identified. A known diabetic, an 11-year-old boy, whose insulin had not been regulated, had 20/100 visual acuity in both eyes, and 4 + sugar in his urine. He was admitted to the hospital for insuline regulation and his glasses' prescription was changed. The child's classroom performance changed.

While mild scoliosis is not uncommon among sixth grade children, several cases were diagnosed as severe by orthopedists. Four sixth graders were to be fitted with braces this summer; three were placed in braces shortly after being screened; 12 are under care of orthopedists for observation and/or exercises. A first grade boy will have surgery this summer for congenital torticollis (stiff neck); another child will be placed in a body cast.

Both female and male students were referred for possible developmental and/or congenital abnormalities. A five-year-old female was found to have a labial fusion which was corrected; one female had no vaginal opening; another six-year-old female had a double ureter; and a twelve-year-old male had no urethral opening. These cases will be followed for possible surgery.

Numerous referrals were made on males at kindergarten, first and sixth grades for inguinal and umbilical hernia and undescended testicles. Ten of these had corrective surgery. Another case that involved a child with an undescended testical resulted in the finding of a family with a high incidence of malignancy in adult males with the same problem. The problem was not previously known and resulted in treatment of the boy's father as well as the child. The nurse's research identified this hereditary problem.

Eye surgery was planned for several children with strabismus, ptosis of the eyelid, and lazy eye. Most of these were kindergarten and first grade children.

# Appendix A
# Problems for Which Students Referred
# 1979-80 School Year

| Problem for Which Student Referred | Kindergarten | Grade One | Grade Six | Total |
|---|---|---|---|---|
| Dental | 820 | 674 | 465 | 1,959 |
| Ear/Hearing | 353 | 259 | 115 | 707 |
| Eye/Vision | 128 | 134 | 250 | 512 |
| Nose, Mouth, Throat | 231 | 191 | 81 | 503 |
| Nutritional | 117 | 99 | 80 | 296 |
| Heart Sounds | 137 | 92 | 40 | 269 |
| Other | 73 | 64 | 119 | 256 |
| Overweight | 73 | 86 | 95 | 254 |
| Infestation | 81 | 98 | 65 | 244 |
| Skin | 76 | 64 | 66 | 206 |
| Medication | 75 | 68 | 60 | 203 |
| Genito-Urinary | 71 | 55 | 63 | 189 |
| Low Hematocrit | 124 | 38 | 25 | 187 |
| Lymphatic System | 83 | 71 | 31 | 185 |
| Speech | 93 | 38 | 14 | 145 |
| Underweight | 46 | 41 | 34 | 121 |
| Musculoskeletal | 39 | 32 | 41 | 112 |
| Back | 28 | 28 | 55 | 111 |
| Respiration | 63 | 28 | 17 | 108 |
| Neurological | 21 | 15 | 22 | 58 |
| Learning | 27 | 17 | 8 | 52 |
| Coping | 20 | 16 | 15 | 51 |
| Extremeties | 9 | 11 | 22 | 42 |
| Blood Pressure | 10 | 6 | 22 | 38 |
| Gastrointestinal | 12 | 14 | 11 | 37 |
| Reflexes | 4 | 9 | 13 | 26 |
| Growth/Development | 15 | 11 | 0 | 26 |
| Joints | 4 | 4 | 12 | 20 |
| Pallor | 6 | 4 | 10 | 20 |
| Physical Abuse/Neglect | 12 | 5 | 2 | 19 |
| Nervousness or Fatigue | 3 | 5 | 10 | 18 |
| Reproductive System | 8 | 3 | 7 | 18 |
| Senses or Consciousness | 6 | 2 | 4 | 12 |
| Endocrine | 5 | 3 | 2 | 10 |
| Dizzy/Vertigo | 1 | 3 | 4 | 8 |
| Movement | 3 | 3 | 2 | 8 |
| Cosmetic | 3 | 1 | 3 | 7 |
| Jaundice | 2 | 0 | 0 | 2 |
| Edema | 2 | 0 | 0 | 2 |

# Appendix B
# Screening Procedures in the Regular School Health Services Program*

**Health Appraisal.**
Health appraisal commonly includes:

- Teacher and/or nurse observation of children to locate symptoms indicating the need for referral
- Vision and hearing screening
- Periodic graphic charting of height and weight
- Medical and dental examinations
- Health assessment

**Observation.**
Neither the nurse nor the teacher is qualified to make medical diagnoses, but their task is that of being alert to symptoms which may indicate the need for further study or referral for medical or other care.

**Medical and dental examinations.**
Pupils usually referred for medical and dental examination are these:

- Kindergarten, first grade, and those new to the school system
- Those suspected of having health problems
- Athletes and other students engaging in strenuous sports
- Special education students

**Health Assessment.**
The school nurse possesses specialized skills for health assessment of each child based on results of various appraisal activities:

- Completing a health history of each child based on information from students, parents, and physician
- Compiling data from routine screening
- Assessing teacher observations
- Observing the child in a variety of settings
- Using special appraisal techniques including observation, percussion, palpation, auscultation, and the use of instruments and laboratory procedures to complete the assessment of health status
- Scoliosis screening has been added.

**Guidelines for Administrators and School Nurses in the School Health Program,* Texas Education Agency, Bulletin 752, 1975, pp. 19-21.

# Appendix C
# Request for Proposals
# Physical Health Screening

I. *Background*

The 63rd Texas Legislature enacted S.B. 593 (T.E.C., §11.20) which authorized the Texas Education Agency to establish pilot programs for the purpose of screening children for health defects or problems in public schools. No funds were appropriated in suport of the Bill at that time. The 65th Texas Legislature appropriated $375,000 for each year of the biennium to be utilized in funding these projects. Eleven pilot projects were implemented during school year 1977-78. Three projects were added making a total of 14 projects for school year 1978-79. Reports outlining the progress of the pilot projects were submitted to the 66th Texas Legislature.

Funds in the amount of $750,000 have been appropriated for the 1979-81 biennium. To determine the feasibility of conducting health screening in all public schools, a limited number of pilot project sites will be selected for school year 1979-80. Screening is to be conducted by school nurses or other allied health personnel in a manner prescribed by the Texas Education Agency and referrals for treatment are to be made as appropriate.

II. *Purposes of Pilot Projects*

A. To standardize procedures for comprehensive health screening.

B. To design procedures for follow-up of referrals for treatment or services made as a result of health screening and to implement these follow-up procedures.

C. To coordinate school health services with instructional, and other student services components in the school.

D. To coordinate school health services with other health services and resources in the community to ensure that all available services are used to their maximum.

III. *Required Physical Screening Procedures*

Physical screening must include the following procedures:

A. Health history.

B. Height/weight measurements recorded on a growth grid—compares individual child with national norms for age and sex.

C. Hearing screening—with an audiometer. School health records must specify screening method used.

D. Inspection of external ear canal and eardrum if other hearing screening has been failed.

E. Vision screening—records must specify screening method used.

F. Screening for anemia—using micro-hematocrit.

G. Blood pressure.

H. Examination of lymph nodes.

I. Head circumference.

J. Abdomen—palpation for possible masses.

K. Heart and lungs—auscultation.

L. Hernia.

M. Neurological examination to include deep tendon reflex and fine motor skills.

N. Orthopedic screening for posture, curvature of spine, leg length, equality, chest deformities, gait observations, and motor coordination.

O. Hair/scalp/skin—general examination for cleanliness and infection.

P. Dental screening.

Q. Developmental screening—observation by teacher coordinated with information collected by nurse—will include an appraisal of motor development, intellectual behavior, social progress, and spatial relationships.

R. Speech screening—observations by teachers are recorded on the health record. Whenever speech and hearing professionals are available in the school program, they should work in cooperation with the school nurse, teacher, physician and others in detecting, examining, and evaluating speech abnormalities.

(At the sixth grade level, all parts of the physical evaluation described above should be repeated with two areas added:)

S. Additional orthopedic examination to include: posture from front, back, and side; alignment of the spine, determining presence and extent of scoliosis, lordosis, kyphosis, and other abnormalities; contour of the chest and abdomen; position of thighs and knees for vertical alignment, knock knees, bow legs, internal/external rotation; gross muscle test for strength, tightness, and range of motion.

T. Additional assessment of physical development.

IV. *Components of Proposal*

Following are six components which must be addressed in each proposal and the requirements regarding the component. A complete description of each component must be provided.

A. *Population to be Screened*

The population to be screened should be kindergarten, first, and sixth grade children.

Schools should plan to screen a minimum of 700 students at these grade levels during one school year. Information collected by the Texas Education Agency shows that time per student for screening and for recording findings is approximately one hour. Adequate time should be allowed for comprehensive follow-up activities on those students referred for health problems.

B. *Resources to Implement Screening*

Project Staff and Training

Each proposal should identify a project manager whose responsibilities include assisting in the overall implementation of the project by:

- assuming all fiscal responsibility;
- informing participating schools (or campuses) about the project, and soliciting staff cooperation;
- assuring that physical facilities are provided on all campuses;
- assisting in arranging screening schedules with schools or campuses;
- understanding the data-collection process and periodically checking with project staff and;
- assisting in coordination with other resources and programs both within the school and in the community.

Each project must be staffed by a minimum of one registered nurse, and one aide (pay grade 1, 2, or 3). The nurse should be capable of planning, organizing, and administering a program of this type, supervising the aide, and handling the record keeping involved. If the school district includes bilingual or culturally different children, a nurse and/or aide who is bilingual and particularly sensitive to the special needs of the community would be an invaluable asset to the project. The aide should also be capable of assisting the nurse in the clerical tasks as well as in the screening itself. Both the nurse and the aide will be expected to receive training under the direction of qualified medical personnel as scheduled by the Texas Education Agency.

School districts should include in their proposal a plan for using the services of a physician as consultant to the project director and staff.

*Equipment*

Equipment, materials, and supplies not ordinarily used in the regular school health program may be needed for the clinic room and nurse office.

C. *School and Community Participation and Coordination of Services*

The school district should involve appropriately the following groups in planning and implementing the project:

- student, parents, and school personnel;
- other appropriate persons—such as those with low income—broadly representative of cultural and educational resources; and
- community health resources and other government agencies.

There should be evidence of coordination with:

- other resources and programs within the school, e.g., instructional programs, other screening programs, student services (counseling, health, visiting teacher, and psychological services), Title I, SCE, ESAA;
- community health resources, and other agencies and programs outside the school.

D. *Parental Involvement and Follow-up Services*

The legislation specifies that no child can be examined without parental permission. Standardized forms for documenting parental authorization and permission will be provided by the Texas Education Agency. [Texas Education Code, §11.20(c)]

Section D (Texas Education Code, §11.20) further states that "whenever an abnormal health condition or problem is found in any child, the school nurse shall, if necessary, assist the family in obtaining access to appropriate health, rehabilitation, or treatment services, and review the case as necessary to determine that corrective action is taken to the extent possible." Therefore, each pilot project proposal should contain a detailed comprehensive plan for achieving such follow-up services.

E. *Evaluation*

Since the Texas Education Agency is responsible by law for evaluating the results of the program, the Agency will identify the data to be collected and provide forms for collecting these data. The data to be collected will include the extent to which screening and follow-up have occurred and reasons for referrals. The procedures for collecting and maintaining the required records should be described, and the staff who will have responsibility for this task should be identified. Careful documentation of all aspects of the project will facilitate the compilation of other data as requested by the Texas Education Agency.

A school district may design its own internal evaluation to be used locally in addition to the evaluation required by the Texas Education Agency. If a local evaluation is to be conducted, the plan should be included in the proposal.

F. *Budget*

Since a major objective of these projects is to determine the feasibility and cost-effectiveness of comprehensive health screening, the proposal must provide detailed budget notes to justify each projected expenditure. The project proposal should reflect clearly the relationship between planning and budget to ensure that resources (personnel, materials, equipment, and services) will be managed effectively. The budget should include only expenditures that are necessary for the success of the project and a budget explanation for major budget categories such as:

- Payroll
- Purchased and contracted services
- Supplies and materials
- Other operating expenses
- Capital outlay

Each budgetary category should contain a detailed breakout of its components, including the period of time for which staff are to be employed. These funds may not be used for any salaries except those of project nurse and aide.

# Suggested List of Equipment, Materials, and Supplies

**Fixed Inventory for Health Screening**

Centrifuge (new or used for Hematocrit test for anemia)
Manometer with 4 cuffs (for blood pressure)
Vision Testor
Dental mirrors and handles
Dental explorers—1 dozen
Stainless steel trays with covers (2)
Tuning fork—512 pts.
Percussion hammer
Otoscope/Opthalmoscope with 2 extra lamps
Stethoscope
Stop watch
Refrigerator
Audiometer
Scales (Kilograms & pounds)
Examining Table
Night table with drawer
3 panel screens (2)
1 utility table
Revolving stools
2 examining lamps
Nurses' bag
Stainless steel tape
Flashlight

**Expendable Supplies for Health Screening**

Green soap—1 gallon
Betadine
PreCal Cap. tubes—600
Tube sealant
Blood Lancets/1000
Alcohol swabs/1000
Heam-Combistix/600
Tongue blades
Towels/per year
Office supplies
- Appointment calendar
- Pens, pencils
- Rubber stamps/pad

½ case tissues
Disposable gowns

Justification for purchase of these items should be included in the application. Some items may be obtained through other sources.

District/ESC Name

**TEXAS EDUCATION AGENCY**
**Division of Student Services and Instructional Coordination**

County-District Number

**Application for Pilot Project for Physical Evaluations of School Children**

Contact Person

Mailing Address

State Project Number
TEA USE ONLY

Position

City, State, and Zip Code

Area Code/Telephone Number

County

Title of Project

Total funds requested: $_____.

**Certification**

I do hereby certify that the _____ school district will conduct the approved project in accordance with all Federal, State and local laws and all requirements set forth in policies and procedures as issued by the Texas Education Agency, and

I further agree that all supporting documents for expenditures under approved program(s) will be maintained on file in the business office of the school district in an orderly manner to permit expeditious audit, and

I further agree that funds will be used as stipulated in the application and attachments thereto and use of funds other than in the manner authorized by this agreement may be construed as misuse and result in the reclaiming of these funds.

I do hereby certify that all information contained in this application and attachments thereto is true and correct, and the local educational agencies named below has authorized me as its representative.

Legal Name of Local School District(s)/ESC

Typed Name of Superintendent

Signature of Superintendent

Document Control Center
Texas Education Agency
201 East 11th Street
Austin, Texas 78701

Return by July 2, 1979

PDA-022R: 9

# Pilot Programs for Physical Evaluations of School Children

**Texas Public School Law Bulletin, Texas Education Code**
**Subchapter A, Section 11.20**

(a) The Central Education Agency shall plan, institute, and supervise pilot programs in various school districts of this state for the purpose of screening children for health defects or problems.

(b) In each district selected for a pilot program, children shall be examined or evaluated in the manner prescribed by the Central Education Agency and by nurses or other allied health personnel specifically authorized to do so by the agency.

(c) Prior notice of the examination shall be given to the parents or guardian of each child, and no child shall be examined or evaluated if his parents or guardian object because of religious convictions.

(d) Whenever an abnormal health condition or problem is found in any child, the school nurse shall:

(1) advise the child's parent or guardian;
(2) suggest what action should be taken;
(3) if necessary, assist the family in obtaining access to appropriate health, rehabilitation, or treatment services; and
(4) review the case as necessary to determine that corrective action is taken to the extent possible.

(e) The agency shall require a record to be kept of each examination and actions taken pursuant to each examination. The record shall be confidential and shall be kept separate from the other records of the child. The records may be used for statistical purposes as long as the identity of each child is kept confidential.

(f) The agency shall require periodic reports from each district participating in the program for the purpose of evaluating the results of the program. The agency shall report its findings and recommendations to the legislature biennially during the first month of the regular session.

(g) The legislature shall appropriate money to finance the cost of the program, including planning, compensation for personal services, and necessary equipment and supplies.

Please add this to the guidelines and application materials for the above pilot programs dated August 15, 1977.

District/ESC Name

County-District Number

Project Title

## PROJECT ABSTRACT

Please respond to each item as briefly and as specifically as possible.

| PROJECT PERIOD | From (Month and Year) | To (Month and Year) | TEA USE ONLY |
|---|---|---|---|
| | | | |
| Grantee Name and Address | | | Telephone |
| | | | |

REQUESTED FUNDING LEVEL FOR PROJECT PERIOD: $
PRIMARY TARGET POPULATION AND NUMBER SERVED:

Staff_____
Students by Grade Level:

K 1 Total

PARAGRAPH DESCRIPTION

MAJOR OBJECTIVES

EVALUATION STRATEGY

RESOURCES REQUIRED (Including staff categories)

District/ESC Name _____ County-District Number _____

**HEATLH SCREENING**
**FINANCIAL BUDGET**
**Fiscal Year 1979-80**

Project Beginning Date _____ Ending Date _____

ENTER DOLLAR AMOUNTS ONLY

| (1) LINE NO. | (2) DESCRIPTION | (3) CLASS/ OBJECT | (4) AMOUNT |
|---|---|---|---|
| 1 | Payroll Costs | 6100 | $ |
| 2 | Purchased & Contracted Services | 6200 | |
| 3 | Supplies and Materials | 6300 | |
| 4 | Other Operating Expense | 6400 | |
| 5 | Capital Outlay—Equipment | | |
| | | | |
| | TOTAL BUDGET | | $ |

| | | |
|---|---|---|
| | FOR TEA USE ONLY—TENTATIVE ENTITLEMENT | $ |

District/ESC Name _____ County-District Number _____

## HEALTH SCREENING SUPPORTING SCHEDULES

REPORT DOLLAR AMOUNTS ONLY

**SCHEDULE A**—Payroll Costs, Class/Object 6100

| Number of Positions | Title of Position | Months Employed | Total Salary |
|---|---|---|---|
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TOTAL PAYROLL COST $ _____

**SCHEDULE B**—Contracted Services, Class/Object 6200

| Type of Service | Person or Agency | Daily Rate* | Amount |
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TOTAL CONTRACTED SERVICES $ _____

*Consultants may not be paid in excess of $100.00 per day unless prior written approval is obtained from the Texas Education Agency.

District/ESC Name

County-District Number

## HEALTH SCREENING
## SUPPORTING SCHEDULES

REPORT DOLLARS ONLY

**SCHEDULE C**—Supplies and Materials, Class/Object 6300

| Type Expense | Amount Requested |
|---|---|
| | $ |
| | |

TOTAL SUPPLIES AND MATERIALS $

**SCHEDULE D**—Other Operating Expenses, Class/Object 6400

| Type Expense | Amount Requested |
|---|---|
| | $ |
| | |

TOTAL OTHER OPERATING EXPENSES $

39

# Appendix D
# Inter-Agency Cooperation


## Texas Education Agency

201 East Eleventh Street
Austin, Texas
78701

- STATE BOARD OF EDUCATION
- STATE COMMISSIONER OF EDUCATION
- STATE DEPARTMENT OF EDUCATION


July 23, 1980

TO THE ADMINISTRATOR ADDRESSED:

The Texas Education Agency (TEA) and the Texas Department of Human Resources (DHR) are collaborating on a plan to integrate school health services and the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) Program. The EPSDT Program, as the name implies, incorporates health screening, diagnostic, and treatment services for children receiving Medicaid. EPSDT screening services administered by DHR, are currently being delivered through a contract with the Texas Department of Health. As of September, 1980, other providers, such as private physicians, community clinics and hospital outpatient departments will be able to provide EPSDT services. In addition, DHR believes that school districts would be effective as EPSDT providers in rural areas, where other providers are not available, or in areas where a significant amount of screening activity is already occurring in the school.

This collaborative effort is also being encouraged by the U.S. Office of Education and the Health Care Financing Administration. The purpose of this endeavor is to integrate EPSDT into existing school health programs. Initially, the number of school districts in Texas providing EPSDT services will be quite limited in order to gain experience with this type of delivery system and work out any unforeseen problems. For this reason, only school districts meeting certain criteria are being notified as possible providers at this time. Specifically, districts are being notified if there are indications that:

1) the district has a substantial number of Medicaid eligible children, and at least one school nurse per 2,000 students;

2) screening, including physical assessment, is part of the school health program.

If your district is interested in becoming an EPSDT provider, application guidelines are avialable from DHR at the following address. However, before requesting these guidelines, you should contact the DHR Director for Medical Services in your area (see map), since it is necessary that your participation as a provider meets local needs as defined by the regional DHR office.

Please read the enclosed information sheet for additional details. Applications will be due November 3, 1980. School districts will be selected based on their suitability as providers and compatibility with local needs. If you would like to apply, send your request for the guidelines to:

Lorenzo Fitzpatrick
EPSDT Program Specialist
Standards & Procedures
Special Medical Services, 612-A
P.O. Box 2960
Austin, Texas 78769

If you have specific questions regarding program details or documentation requirements, you may contact Mr. Fitzpatrick at (512) 835-0440, ext 2878. For information regarding the relationship of EPSDT to other school health programs, plese contact Dr. James V. Clark of the Texs Education Agency at (512) 475-5838.

Sincerely,

Alton O. Bowen, Commissioner
Texas Education Agency

Jerome Chapman, Commissioner
Department of Human Resources

## COMPLIANCE STATEMENT

**TITLE VI, CIVIL RIGHTS ACT OF 1964; THE MODIFIED COURT ORDER, CIVIL ACTION 5281, FEDERAL DISTRICT COURT, EASTERN DISTRICT OF TEXAS, TYLER DIVISION**

Reviews of local education agencies pertaining to compliance with Title VI Civil Rights Act of 1964 and with specific requirements of the Modified Court Order, Civil Action No. 5281, Federal District Court, Eastern District of Texas, Tyler Division are conducted periodically by staff representatives of the Texas Education Agency. These reviews cover at least the following policies and practices:

(1) acceptance policies on student transfers from other school districts;

(2) operation of school bus routes or runs on a non-segregated basis;

(3) nondiscrimination in extracurricular activities and the use of school facilities;

(4) nondiscriminatory practices in the hiring, assigning, promoting, paying, demoting, reassigning, or dismissing of faculty and staff members who work with children;

(5) enrollment and assignment of students without discrimination on the basis of race, color, or national origin;

(6) nondiscriminatory practices relating to the use of a student's first language; and

(7) evidence of published procedures for hearing complaints and grievances.

In addition to conducting reviews, the Texas Education Agency staff representatives check complaints of discrimination made by a citizen or citizens residing in a school district where it is alleged discriminatory practices have occurred or are occurring.

Where a violation of Title VI of the Civil Rights Act is found, the findings are reported to the Office for Civil Rights, Department of Health, Education and Welfare.

If there is a direct violation of the Court Order in Civil Action No. 5281 that cannot be cleared through negotiation, the sanctions required by the Court Order are applied.

**TITLE VII, CIVIL RIGHTS ACT OF 1964; EXECUTIVE ORDERS 11246 AND 11375; TITLE IX, 1973 EDUCATION AMENDMENTS; REHABILITATION ACT OF 1973 AS AMENDED; 1974 AMENDMENTS TO THE WAGE-HOUR LAW EXPANDING THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967; AND VIETNAM ERA VETERANS READJUSTMENT ASSISTANCE ACT OF 1972 AS AMENDED IN 1974.**

It is the policy of the Texas Education Agency to comply fully with the nondiscrimination provisions of all federal and state laws and regulations by assuring that no person shall be excluded from consideration for recruitment, selection, appointment, training, promotion, retention, or any other personnel action, or be denied any benefits or participation in any programs or activities which it operates on the grounds of race, religion, color, national origin, sex, handicap, age, or veteran status (except where age, sex, or handicap constitute a bona fide occupational qualification necessary to proper and efficient administration). The Texas Education Agency makes positive efforts to employ and advance in employment all protected groups.